

ABSTRACT OF THE DISCLOSURE

A fill tube assembly is for a casting mold. The fill tube assembly includes a fill tube having a tubular member with a receiving end, a mold-engaging end and an intermediate portion. The mold-engaging end has a tapered flange radially extending therefrom, the remainder of the tubular-member has a substantially uniform cross-section. A clamping assembly is structured to maintain a substantially leak-proof seal at the fill tube, casting mold interface while accommodating dimensional variations. The clamping assembly includes a gasket, a load ring, a clamping plate and a pre-load gap between the clamping plate and the casting mold and optionally includes a dimensional compensating ring. When tightened, the clamping plate biases the load ring against the flange thereby distributing a uniform load against the casting mold, compressing the gasket therebetween while narrowing the pre-load gap to accommodate dimensional variations. A method of use is also disclosed.